# **Montague Public Tree Protection Bylaw**

### 1. Preamble:

The Town of Montague recognizes that trees are an asset to the community and provide a healthier and more beautiful environment in which to live. Trees improve air quality and provide shade, wildlife habitat, and beauty. Trees give protection from wind, glare and noise, and act as barriers and water quality protection. Public trees and landscaping are economically beneficial in attracting new residents, shoppers, visitors and industry. When properly chosen varieties are planted in appropriate settings, trees enhance property values, promote the economic viability of commercial districts, and enhance the desirability and sustainability of residential neighborhoods.

# 2. Intent and Purpose:

This by-law is enacted for the purpose of preserving and protecting public shade trees pursuant to Massachusetts General Law Chapter 87. It is also enacted to encourage the planting of more public shade trees than are removed to compensate for tree losses and the time it takes for trees to mature.

### 3. Definitions:

**Critical Root Zone (CRZ):** Defined by measuring outwards from the trunk a minimum of 1.25 feet for every inch diameter of tree trunk four feet above the ground. For any tree, a minimum of six feet must be protected around trees regardless of the trunk diameter.

**Public Tree:** Any tree within public right-of-way, in a municipal park, or adjacent to public buildings. **Right-of-Way:** All land within the boundaries of the public right-of-way as set forth by an order of the town laying out a public way. The public right-of-way may include not only the traveled surface of the public way but lands adjacent thereto, including sidewalks and the tree belt.

**Drip Line:** Drip line of a tree is the area defined by the outermost circumference of a tree's canopy, where water drips from and onto the ground.

#### 4. Tree Warden:

The Tree Warden is an elected position pursuant to Massachusetts General Law, Chapter 41, Section 106. The duties and responsibilities of the Tree Warden shall conform to the Massachusetts General Law Chapter 87 and shall include, but not be limited to the following:

- Care, control, and management of all trees within public rights-of-way, adjacent to public buildings on public land, and on public commons; and the care, control, and management of trees within parks if so requested by the Director of Parks and Recreation;
- Expenditure of funds for public tree planting and maintenance consistent with this bylaw and Massachusetts General Law Chapter 87;
- Enforcement of the provisions of this bylaw and Massachusetts General Law Chapter 87;
- Preparation and maintenance of a current Public Tree Management Plan;
- Coordination with the Highway Department, Planning Department, Parks and Recreation, Planning Board, and the Montague Tree Advisory Committee on matters related to urban forestry and public tree management, and;
- Develop regulations for the care and preservation of public trees and establish fines and forfeitures for violation thereof.
- Other responsibilities consistent with this bylaw and Massachusetts General Laws.

### 5. Cutting of Public Trees:

Consistent with Massachusetts General Law Chapter 87, no person except the Tree Warden, may cut, trim, prune, damage, or remove any part of a public tree, including the roots within the drip line of the tree, without written permission as described in Section 7.

The Tree Warden may not remove, permit the removal of, or cause to be destroyed any tree greater than 1.5 inches in caliper without a duly advertised public hearing as specified in Massachusetts General Law Chapter 87, or if objection is given at or prior to the hearing in writing, without the additional approval of the Selectboard, unless that tree is determined to be an imminent hazard tree, as described in Section 8.

Utilities may, or at the request of the Tree Warden must, file an annual vegetation management plan and/or a hazard tree removal plan.

In all cases, pruning and removal of public trees shall be done in accordance with the current ANSI pruning standards.

### 6. Planting of Public Trees:

No person except the Tree Warden may plant a tree on public property without written permission as described in Section 7.

No trees, except those smaller species appropriate for planting under utilities, shall be planted within 10 lateral feet of an overhead electric utility wire.

Consistent with Massachusetts General Law Chapter 87, the Tree Warden may plant trees within 20 feet of the public right-of-way with the written consent of the adjoining land owner. The Property owner will own the tree immediately after planting and is responsible for the maintenance for the lifetime of the tree. The Tree Warden may require a one-time cost share for the expense of the tree.

#### 7. Permission for Planting, Cutting, Pruning or Removal of Non-Hazardous Public Trees:

No person other than the Tree Warden shall plant, prune, trim, cut above the ground, remove, or conduct any excavation within the drip line of, a public tree without first filing an application and procuring written permission from the Tree Warden. The Tree Warden may grant permission, may deny permission or may issue permission with conditions.

Permission must be granted by the Tree Warden not less than three business days in advance of the time the work is to commence with the exception that, if the work consists of cutting down or removal of a public tree, the application shall be made no less than thirty days in advance. At the time that the application is submitted, applicants shall pay a non-refundable fee of five dollars per tree to the Montague Tree Fund. In cases of emergency, an applicant may seek and receive oral permission from the Tree Warden to trim or excavate within the drip line of a public shade tree without first requesting permission in writing. An emergency is defined as an unforeseen occurrence, which requires immediate action to avoid or reduce significant injury or damage to persons or property. Within three business days after oral permission is granted, the applicant must submit a written request to the Tree Warden who shall grant pre-approval due to emergency.

#### Removal:

An applicant who wishes to remove a non-hazardous public shade tree is responsible for the following expenses:

- Cost of advertising a hearing as specified in Massachusetts General Law Chapter 87;
- Cost of removal of tree and stump, including hauling away of all debris, and proper filling of stump hole:
- Planting of sufficient replacement trees as described below;
- Cost of police traffic details, repair of street surface and road shoulder, protection and restoration of utility structures; and
- All other costs related to the removal and replanting.

Public trees shall not be removed for a private purpose without suitable compensation to the Town for replacements. The value of existing shade trees is to be calculated on an inch-by-inch replacement basis. Replacements shall be at least two-inch trunk diameter, nursery grown stock. The Tree Warden may, at their discretion, require larger replacements. For example, if an 18-inch diameter tree, measured four feet above grade is to be removed, the applicant must sufficiently reimburse the Town to provide for the purchase and planting of nine, two-inch diameter replacements. At the discretion of the Tree Warden, the applicant shall either:

- A. Arrange to plant suitable replacements using his/her own contractor, working to the Town's specifications, or
- B. Make a cash contribution to the Montague Tree Fund to be used exclusively for the purchase and planting of replacements, and related expenses.

If the applicant proposes to trim or prune a public tree, and if, in the opinion of the Tree Warden, the proposed work will drastically affect the health, beauty, structural stability, or safety of the tree, the Tree Warden may consider the proposed work to have the same effect as the removal of the tree. In these cases, the Tree Warden may either order the removal of the tree, or allow the tree to remain, provided that it does not present an imminent hazard. In either case, appropriate replacement plantings must be provided by the applicant.

Nothing contained in this bylaw shall prohibit the Tree Warden from refusing to permit the cutting, trimming or removal of non-hazardous trees.

All trees or tree parts (i.e. wood) removed from the town trees are owned by the Town of Montague, with the exception of fallen leaves.

#### 8. Removal of Hazard Trees:

The Tree Warden may remove, without a public hearing, a tree that is determined by the Tree Warden, to be an imminent hazard to persons or property.

The hazard determination shall be made based on an objective risk tree rating system such as the USDA Forest Service 12-point Risk Tree Rating system or the International Society of Arboriculture Hazard Tree Evaluation system. Hazard trees shall be prioritized for pruning, removal, or otherwise minimizing the risk based on hazard trees objectively presenting the most risk.

#### 9. Fines:

Any person who removes, or causes to be destroyed, a non-hazardous public tree without a duly advertised hearing, permission from the Tree Warden, and the approval of the Selectboard if an objection is made to the removal, shall pay a fine of up to \$500 or the appraised value of the tree, whichever is greater, to the Montague Tree Fund.

Any person who cuts, trims, prunes, damages or removes any part of a public tree, including the roots within the drip line of the tree, without written permission, or who fails to comply with the conditions of their permission, shall pay a fine of up to \$100 per tree to the Montague Tree Fund.

This provision is inclusive, but not limited to the following prohibited acts:

- Mutilating (e.g. driving in nails or screws), girdling, carving into, or topping a tree;
- Damage to the root system by trenching, digging, or other excavation;
- Tapping a publicly owned sugar maple;
- Removing any tree guard, tree stake, watering bag, or other device or material intended for the protection or to support the health of a public tree;
- Covering or obstructing any open land at the base of a public tree designed to permit access of air, water and fertilizer to the root system;
- Applying or sweeping road salt onto the CRZ of a public tree;
- Securing, fastening or running any rope, wire, holiday lighting, unprotected electrical installation, or other device or material to, around or through a public tree, or attaching any sign, poster, notice or other object to any public tree, except that the Tree Warden may authorize tying temporary signs to such trees as necessary;
- Causing or encouraging any fire or burning within the drip line of any public tree. This includes the grilling of food below a public tree, within the drip line, unless the grill is provided in a public park and is permanently installed under the tree;
- Paving over the tree belt and/or over the CRZ on public land;
- Parking a vehicle on the CRZ of a public tree;
- The application of chemicals including, but not limited to, pesticides and herbicides on public land.

## 10. Public Hazard and Abatement:

Upon a determination by the Tree Warden that a private tree constitutes a public hazard, they shall give written notice to the owner of the property upon which said hazard exists to remove, or otherwise mitigate the hazard posed by such tree as to cause the hazard to the public to be abated. Failure to comply with such written notice within fifteen days thereafter is a violation of this section, and the Tree Warden or coworkers may then remove or trim such tree and assess the cost thereof against the property.

## 11. Severability:

Should any part or provision of this bylaw be declared by a court of competent jurisdiction to be invalid, the same shall not affect the validity of the bylaw as a whole or any part thereof other than the part held to be invalid.

## **Appendix A. Suitable Trees for the Town of Montague (May 2019)**

Note: A more extensive discussion of tree tolerances and preferences can be obtained from the MTC in an expanded treatment of this list. *NOTE:* specific cultivar ("variety") names are listed intentionally. Many species are not suitable for various reasons but the specific cultivars may have special traits that make them much more desirable (e.g. no seed production, narrow outline, shorter stature, etc.). Measurements are mature HEIGHT X WIDTH. Ultimate size is influenced by growing conditions and regional climate. All trees are cold hardy to at least Zone 5 (all of the town of Montague).

## Shade trees and ornamental flowering trees

**Acer campestre** (Hedge Maple) +\* (**A**, **B**, **C**) – preferred cultivars are Metro Gold® (aka 'Panacek') and Streetwise<sup>TM</sup>(aka 'Stwizam') 30'x30'. Obtain trees trained to **one** leader.

Acer ginnala (Amur Maple) +\* (A, B, C) Obtain trees trained to one leader. 20' x 25'

Acer miyabei (Miyabei Maple) \* (E) – preferred cultivar is State Street<sup>TM</sup> (aka 'Morton') 35' x 35'.

Acer rubrum\* (D, E) (Red or Swamp Maple) Male cultivars are preferred to avoid seed.

**Acer tataricum** (Tatarian Maple) +\* (**A**, **B**, **C**) – best cultivar is Rugged Charm®, aka 'JFS-KW2', and HotWings® (aka 'GarAnn') 20' x 20'.

Catalpa speciosa\* (Northern Catalpa) (E). 45'x 35'

*Celtis occidentalis* (Common Hackberry) \* (**A** – **if lines are not droopy**, **B**, **C**) – Better cultivars include 'Chicagoland' and Prairie Sentinel<sup>TM</sup> (extremely narrow)

*Cercis canadensis* (Eastern Redbud) + (A – see conditions) – 20'x20'

Cornus mas (Cornelian Cherry Dogwood) +\* (A, B, C) 20 to 25 feet Buy only those trained into a tree form.

*Cotinus* x 'Grace'+\* (Grace Cotinus) (**A**, **B**, **C**) 20'x15' Use only specimens trained to a single stem.

Crataegus viridis 'Winter King' (Winter King Hawthorn) +\* (A, B, C) - 30' x 30'

*Eucommia ulmoides* (E) (Hardy Rubber Tree) – 45' x 45' after 30 years. Use any but Emerald Pointe™ is an upright column only 5 feet wide

*Ginkgo biloba*\* (**E**) (Ginkgo or Maindenhair tree) Huge but very slow. Use only male clones like 'Autumn Gold', 'Princeton Upright'

*Gleditsia triacanthos* var. *inermis*\* (C) (Thornless Honeylocust) (preferably 'Skyline', 'Shademaster' or the narrower 'Draves' aka Street Keeper® Honeylocust). 40-50' x 40-50'

*Heptacodium miconioides* (Seven Son Flower) +\* (**A**, **B**, **C**) **Only use single trunk specimens** 15-20' at maturity with a 10' spread.

Liquidambar styraciflua 'Ward' (Cherokee™ Sweetgum) \* (E) 60'x70'Maackia amurensis (Amur Maackia) +\* (A) 25'-30' '

*Maclura pomifera* 'White Shield' (White Shield Osage Orange) +\* (A, B, C) 30' x 30'.

Magnolia 'Galaxy' (Galaxy Magnolia) \* (E) 30' x 20'.

Magnolia x soulangeana (Saucer Magnolia) + (E) generally 25'x 25'

*Malus* 'Adirondack' (Adirondack Crabapple) +\* (A, B, C). 18'x14'.

Malus 'Sugar Tyme' (Sugar Tyme Crabapple) +\* (A, B, C). 18'x16'

*Malus* 'Donald Wyman' (Donal Wyman Crabapple) +\* (B, C). 15' to 20' x 20 to 25'

**Platanus** × **acerifolia** (Planetree) \* (E). 80' x 80' is possible. Use only disease-resistant cultivars like 'Morton Circle' aka Exclamation!® or 'Bloodgood'.

**Prunus sargentii** +\* (Sargent Cherry) (**A**, **B**) 30'x30' The cultivar 'Columaris' is a narrow (to 20') vase shaped tree useful when width is an issue.

Prunus serrulata 'Kwanzan' (Kwanzan cherry) +\* (A, B) 25'x25'

Prunus virginiana 'Canada Red' (Canada Red Choke Cherry) \* (A, B, C). Purple leaves. 25-35'x18'

Prunus x yedoensis (Yoshino Flowering Cherry) (A, B) 25' x 25'

**Quercus** Oaks produce acorns, which can litter streets and if planted near fast traffic roads hit moving cars at high speed. Oaks also extend cleanup season as many leaves are retained until spring.

Quercus bicolor \* (Swamp White Oak) (E) About 50'x 50'

Quercus palustris \* (Pin Oak) ( $\mathbf{C}$ ,  $\mathbf{E}$ ) – 60'x40'

Quercus rubra \* (Red Oak) (E) 70'x60'

**Sophora japonica**, now **Styphnolobium japonicum** (Scholar Tree) \* (**E**). '60'x 60' at maturity. Regent' is the best cultivar as it grows fast enough to be useful.

*Syringa reticulata\**? (Japanese Tree Lilac) (**A**, **B**). 20'x20' 'Ivory Silk', 'Summer Snow', and 'Regent' will perform best but mixed results under city conditions .

**Taxodium distichum** (Bald Cypress) \* (**D**, **E**) Preferred cultivars are 'Mickelson' aka Shawnee Brave® (50'x20') or 'Skyward' (20'x6')

Tilia americana 'Redmond' (Redmond Linden) \* (E).

*Tilia cordata* × *mongolica* 'Harvest Gold' (Harvest Gold Linden) \* (E) 40'x 30'.

*Tilia cordata* (Littleleaf Linden) \* (E) Greenspire® or 'Norlin' are good culitvars but there are many good selections. 60'x35'

Ulmus davidiana var. japonica 'Discovery' (Discovery Elm)\* (C, E). 40'x35'

*Ulmus* 'Frontier' (Frontier Elm) \* (A, C, E). (35'x20')

*Ulmus wilsoniana* 'Prospector' (Prospector Elm) \* (E) 40'x25'

*Ulmus* 'Morton Glossy' (Triumph<sup>TM</sup> Elm) \* (E) 50'x40'

Zelkova serrata (Japanese Zelkova) \* (A, B for 'Musashino', C, E for the rest)

Dwarf 'JFS-KW1' aka City Sprite® (24'x18'), Wireless® aka 'Schmidtlow' flat top that avoids power lines (24'x35') or use 'Musashino' tight upright column (45'x15') or 'Village Green' when space permits as it provides more shade (50'x50').

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#### KEY:

Trees with no asterisk or plus sign are suitable for parks and open spaces and may not tolerate street conditions (drought, salt, compaction, limited root zone).

- \* Trees that can tolerate street conditions (size, width, shade vs. sun, etc. still need to be considered). The width of the tree belt or size of a tree pit will greatly influence success on some if not all of these.
- + Trees suitable for use under power lines.

Mapping codes below established by the Franklin Regional Council of Governments (FRCOG)

- A. Under utility lines
- B. In otherwise constrained canopy area (but not under utility line)
- C. In constrained root area
- D. In wetland or river area
- E. No constraints (park, front yard, wide tree belt (8 feet or greater)

## Fruit trees

The planting of edible fruit or nut bearing trees on municipal tree belts is prohibited in Montague, except by the permission of the Tree Warden. Fruit and nut trees can cause damage to personal property (e.g. automobiles) and their low-lying limbs can provide obstruction to easy passage of pedestrians on sidewalks. They are generally considered shorter lived and more pest prone than urban shade trees.

Acknowledging the important resource (nutritious fresh food) and positive community associations and harvesting traditions that develop around fruit and nut trees, the use of edible fruit and nut bearing species at community gardens and certain parklands is acceptable, with the permission of the Tree Warden.

If fruit trees are to be planted the following should be used because they require less intensive pest control:

Apple varieties ('Baldwin', 'Raritan', 'Northern Spy', 'Fuji', 'Liberty', 'Honeycrisp', 'Red Delicious', and 'Gold Delicious')

Peach varieties ('Harcot')

Pear varieties ('Seckel')